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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,276	12/13/2000	Thomas J. Kolze	2875.0900002	7915

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STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
1100 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

DUONG, FRANK

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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08/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/737,276	Applicant(s) KOLZE, THOMAS J.	
	Examiner Frank Duong	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32 and 34-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 32 and 34-39 is/are allowed.
- 6) ☒ Claim(s) 40-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is a response to communications dated 06/18/08. Claims 32, 34-53 are pending in the application.

Specification

2. The amendment filed 04/16/07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

- a) Newly added specification on pages 3-4 of the amendment filed 04/16/07.
- b) Newly added figures 14-17.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 40-53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the original specification for

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the following claimed limitations in the newly added claims: *“storing at least one first user unique parameter corresponding with a first carrier frequency”, “storing at least one second user unique parameter corresponding with a second carrier frequency that is different from the first carrier frequency”, as recited in claims 40-42; “wherein the at least one first user unique parameter includes at least one selected from the group consisting of a transmit power level, fine frequency tuning information, timing information, and transmit equalization information”, as recited in claim 41; “allocating a wide-band channel for transmission of relatively long packets; allocating a narrow-band channel for transmission of relatively short packets; and transmitting a data packet having a data packet length using either the wide-band”, as recited in claim 43-50; and “allocating a first carrier frequency for communication of comparatively short packets using a comparatively low symbol rate; allocating a second carrier frequency that is different from the first carrier frequency for communication of comparatively long packets using a comparatively high symbol rate”, as recited in claim 51-53.*

It is understood the present invention remedies the disadvantage of a cable modem (CM) in a prior art DOCSIS system by modifying the ranging process of the DOCSIS standard to allow a cable modem to initialize/range on multiple channels to improve performance of short bursts in an impulsive noise environment. There are two techniques for doing so as disclosed in the original specification: a first technique entails an alteration to a DOCSIS compliant CM and a second technique involves a modification to the DOCSIS specification. Both of these techniques are disclosed on pages 23-24 of the original specification in reference to a flow diagram of Figure 9,

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blocks 914-920. In accordance with the description of blocks 914-912, there are features that the CM is encoded with vendor specific information for identifying special capabilities to let the headend know that it is capable of being initialized on more than one channels and the CM, during the registration process, sends a message to the headend requesting initializing on more than one channels. The disclosed invention deals only with a process or procedure for allowing the CM to range on multiple channels, not the time slots or resource allocation in a DOCSIS system. Therefore, from the above features, the claimed limitations of *"storing at least one first user unique parameter corresponding with a first carrier frequency"*, *"storing at least one second user unique parameter corresponding with a second carrier frequency that is different from the first carrier frequency"*, as recited in claims 40-42; *"wherein the at least one first user unique parameter includes at least one selected from the group consisting of a transmit power level, fine frequency tuning information, timing information, and transmit equalization information"*, as recited in claim 41; *"allocating a wide-band channel for transmission of relatively long packets; allocating a narrow-band channel for transmission of relatively short packets; and transmitting a data packet having a data packet length using either the wide-band"*, as recited in claim 43-50; and *"allocating a first carrier frequency for communication of comparatively short packets using a comparatively low symbol rate; allocating a second carrier frequency that is different from the first carrier frequency for communication of comparatively long packets using a comparatively high symbol rate"*, as recited in claim 51-53, cannot unambiguously

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derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

(note: Due to the problems discussed above, there is no art applied to determine the allowability of claims 40-53 at this time)

Allowable Subject Matter

4. Claims 32 and 34-39 are allowed.

Response to Arguments

5. Applicant's arguments filed 04/16/07 and 06/18/08 have been fully considered but they are not persuasive.

The responses to the arguments filed 04/16/07 in the Office Action dated 07/18/07 are still applicable. The amendment filed 04/16/07 had inadvertently introduced new matters into the specification, the drawings, and claims 40-53 for the rationales clearly stated in the Office Action dated 07/18/07.

Pertaining the rejection under 35 U.S.C. § 112, first paragraph of claims 40-53, the Applicant appears to rely on the DOCSIS specification for the support of the newly added/claimed subject matters in the rejected claims 40-53. The Applicant, throughout the response, refers the statement "*incorporate by reference of the DOCSIS specification*" to assert the support for the newly added subject matters (specification, drawings and claims). Such assertion is respectfully disagreed by the Examiner. The

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newly added subject matters are commonly referred to as "essential material." In accordance to the teaching of the MPEP, chapter 608.01 (P) and rule 37 CFR 1.57 (c) verbatim *"Essential material" may be incorporated by reference, but only by way of an incorporation by reference to a U.S. patent or U.S. patent application publication, which patent or patent application publication does not itself incorporate such essential material by reference. "Essential material" is material that is necessary to:*

(1) *Provide a written description of the claimed invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and set forth the best mode contemplated by the inventor of carrying out the invention as required by the first paragraph of 35 U.S.C. 112.*" In other words, incorporation by reference of the DOCSIS specification is improper. Thus, the Applicant cannot rely on it to assert that the written requirement, required by the first paragraph of 35 U.S.C. 112, is satisfied.

On page 17 of the outstanding response, Applicant refers to the passage *"DOCSIS does not provide that a CM is ranged or initialized on two or more channel at the same time; in fact there is no provision requiring the CM to store more than one set of user unique parameters,"* to argue there is support for the disputed limitation of *"storing at least one first user unique parameter corresponding with a first carrier frequency."*

Examiner respectfully disagrees. The referred passage just merely discusses the ranging process of a cable modem in the DOCSIS specification. It clearly states

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“there is no provision requiring the CM to store more than one set of user unique parameters.” One of ordinary skilled in the art, after reading the passage, would clearly understand that the CM in the DOCIS specification is not capable to store more than one set of user unique parameters. The passage provides no support for the disputed limitation. In addition, from the disclosed passage, the Applicant cannot unambiguously derive to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicant is reminded that the written requirement of the 35 U.S.C. 112, first paragraph clearly states that “The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.”

On page 18 of the outstanding response, Applicant refers to the passage *“the CM maintains ‘ranging’ on at least two carrier frequencies or channels, at least one channel is narrowband and at least one channel is wideband.”* (Specification, page. 16, lines 34-35” to argue that there is support for the claimed limitation of *“storing at least one second user unique parameter corresponding with a second carrier frequency that is different from the first frequency.”*

Examiner respectfully disagrees for the same rationales discussed above.

As for other disputed limitations discussed on pages 18-20, Applicant refers to certain passages in the specification and alleges/argues that there is support for the

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disputed limitations. The arguments have been noted, but not persuasive for the same rationales discussed above.

Examiner believes an earnest attempt has been made in addressing all of the Applicant's arguments. Due to the response fails to place the instant application in a favorable condition for allowance, the rejection is maintained.

Perhaps Applicant should cancel new matter in the specification and in the rejected claims in a response to this Office Action to expedite the prosecution and to place the instant application in a favorable condition for allowance.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Duong whose telephone number is 571-272-3164. The examiner can normally be reached on 7:00AM-3:30PM, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frank Duong/
Primary Examiner, Art Unit 2616
August 18, 2008